

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1588702

Luminaire Tested: 24CZSP-A-52HE-L930-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588702
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-52HE-L930-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 5000 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

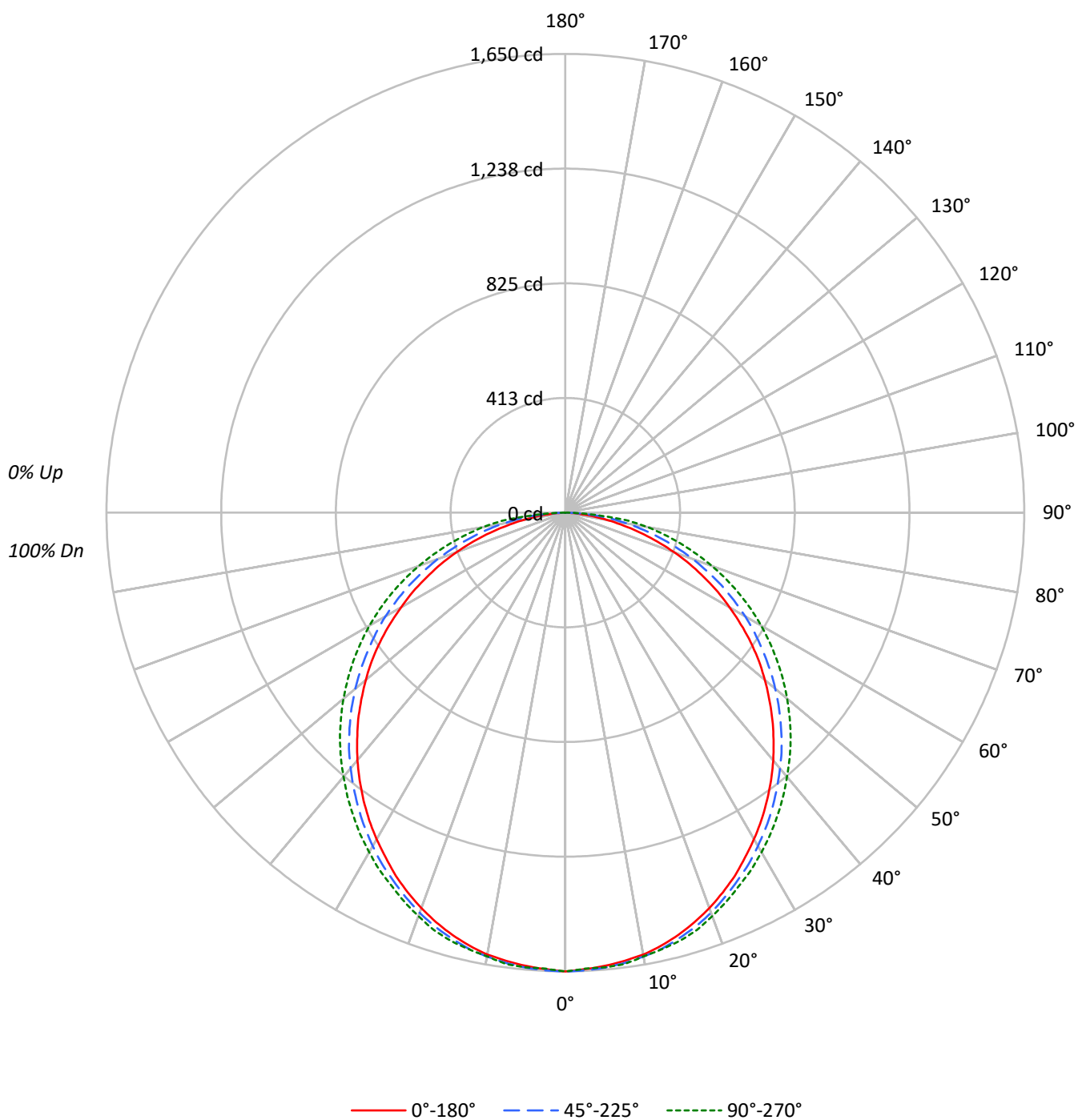
Lumens per Lamp: N/A
Luminaire Lumens: 4818.0 lumens
Efficiency: N/A
Efficacy: 131.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1588702

CATALOG NUMBER: 24CZSP-A-52HE-L930-S

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2528	2528	2528
5°	2516	2526	2524
10°	2511	2522	2521
15°	2493	2513	2528
20°	2468	2497	2518
25°	2437	2471	2501
30°	2399	2449	2494
35°	2364	2425	2487
40°	2325	2401	2479
45°	2281	2377	2482
50°	2232	2348	2481
55°	2174	2315	2484
60°	2092	2289	2490
65°	1996	2245	2498
70°	1861	2183	2509
75°	1658	2096	2534
80°	1371	1995	2658
85°	891	1801	2323

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2741 cd/sqm

TEST NUMBER: P1588702

CATALOG NUMBER: 24CZSP-A-52HE-L930-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.1	3.2
10°-20°	446.9	9.3
20°-30°	674.0	14.0
30°-40°	811.8	16.8
40°-50°	847.8	17.6
50°-60°	778.6	16.2
60°-70°	613.3	12.7
70°-80°	376.3	7.8
80°-90°	113.2	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1277.0	26.5
0°-40°	2088.8	43.4
0°-60°	3715.3	77.1
0°-90°	4818.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4818.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1650	1650	1650	1650	1650	
5°	1636	1639	1643	1648	1642	156
15°	1572	1575	1585	1594	1594	443
25°	1442	1445	1462	1480	1480	664
35°	1264	1271	1297	1324	1330	791
45°	1053	1065	1097	1135	1146	812
55°	814	829	867	916	930	727
65°	551	570	620	671	689	545
75°	280	302	354	410	428	297
85°	51	70	102	130	132	66
90°	0	0	0	0	0	

TEST NUMBER: P1588702

CATALOG NUMBER: 24CZSP-A-52HE-L930-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1650.3	1650.3	1650.3	1650.3	1650.3
2.5°	1644.0	1647.1	1648.2	1649.2	1641.8
5°	1636.5	1638.7	1642.9	1648.2	1641.8
7.5°	1626.0	1628.1	1633.4	1640.8	1637.6
10°	1614.3	1615.4	1621.7	1627.0	1620.7
12.5°	1595.3	1598.5	1605.9	1610.1	1608.0
15°	1572.1	1575.2	1584.7	1594.3	1594.3
17.5°	1544.6	1548.8	1560.4	1573.1	1574.2
20°	1513.9	1517.1	1531.9	1544.6	1544.6
22.5°	1479.0	1483.3	1498.1	1511.8	1513.9
25°	1442.0	1445.2	1462.1	1480.1	1480.1
27.5°	1398.7	1405.0	1426.2	1444.1	1448.4
30°	1356.4	1361.7	1384.9	1407.1	1410.3
32.5°	1312.0	1318.3	1342.6	1367.0	1372.2
35°	1264.4	1270.8	1297.2	1323.6	1330.0
37.5°	1214.7	1222.1	1249.6	1280.3	1286.6
40°	1162.9	1171.4	1201.0	1233.8	1240.1
42.5°	1107.9	1119.6	1151.3	1185.1	1194.6
45°	1053.0	1064.6	1097.4	1135.4	1146.0
47.5°	994.8	1008.6	1042.4	1082.6	1094.2
50°	936.7	950.4	985.3	1028.7	1041.3
52.5°	877.5	891.2	927.2	972.6	986.4
55°	814.0	828.8	866.9	915.5	930.3
57.5°	748.5	767.5	807.7	857.4	872.2
60°	683.0	702.0	747.4	796.1	813.0
62.5°	618.5	636.4	683.0	734.8	752.7
65°	550.8	569.8	619.5	671.3	689.3
67.5°	484.2	503.2	552.9	606.8	625.9
70°	415.5	436.6	487.4	541.3	560.3
72.5°	346.8	369.0	420.8	475.7	493.7
75°	280.2	302.4	354.2	410.2	428.2
77.5°	214.6	238.9	289.7	346.8	363.7
80°	155.4	178.7	226.2	282.3	301.3
82.5°	99.4	119.5	167.0	219.9	233.6
85°	50.7	69.8	102.5	130.0	132.2
87.5°	15.9	22.2	33.8	50.7	51.8
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588702

CATALOG NUMBER: 24CZSP-A-52HE-L930-S

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.70	16.36	15.06	16.68	16.99	15.53	17.19	15.89	17.51	17.82
	3H	16.46	17.96	16.83	18.29	18.65	17.65	19.15	18.02	19.48	19.84
	4H	17.07	18.50	17.47	18.84	19.22	18.54	19.96	18.93	20.30	20.68
	6H	17.48	18.81	17.90	19.17	19.56	19.32	20.64	19.73	21.00	21.39
	8H	17.59	18.86	18.02	19.24	19.64	19.64	20.90	20.06	21.29	21.69
	12H	17.64	18.85	18.07	19.24	19.66	19.85	21.06	20.28	21.44	21.87
4H	2H	15.47	16.89	15.87	17.24	17.62	16.12	17.54	16.52	17.89	18.26
	3H	17.45	18.65	17.86	19.04	19.44	18.47	19.67	18.88	20.07	20.47
	4H	18.19	19.27	18.62	19.68	20.12	19.52	20.61	19.96	21.02	21.46
	6H	18.71	19.67	19.17	20.11	20.56	20.48	21.43	20.93	21.87	22.32
	8H	18.86	19.75	19.32	20.19	20.66	20.87	21.77	21.33	22.21	22.67
	12H	18.94	19.75	19.42	20.22	20.69	21.15	21.96	21.63	22.43	22.90
8H	4H	18.64	19.54	19.10	19.98	20.44	19.81	20.71	20.27	21.15	21.61
	6H	19.31	20.05	19.80	20.54	21.01	20.93	21.67	21.42	22.16	22.63
	8H	19.52	20.19	20.02	20.69	21.17	21.44	22.11	21.94	22.61	23.10
	12H	19.66	20.25	20.16	20.74	21.30	21.82	22.42	22.33	22.90	23.46
12H	4H	18.73	19.54	19.21	20.01	20.48	19.84	20.64	20.32	21.12	21.58
	6H	19.44	20.11	19.94	20.61	21.10	20.97	21.64	21.48	22.15	22.63
	8H	19.72	20.31	20.22	20.80	21.36	21.55	22.14	22.06	22.63	23.19